

***The Institution of Engineers, Australia:
Monaro Group***

Oral History Program: Biographical Notes

**Keith William Montague (1923-)
Electrical Engineer**

- Birth & Family:** Keith Montague was born on the 9th of December 1923 in Malvern, an inner suburb of Melbourne. He was the youngest of nine children and his father, John Edward Montague was a carpenter and furniture maker. Keith married Velma - in December 1947 and they had three daughters & one son.
- Education:** Primary and secondary schooling in Upwey, in the Dandenong Ranges, initially in a two-teacher school in a hall with fifty students.
- Melbourne Institute of Technology.- Certificate of Electrical Engineering, and part-time Degree in Electrical Engineering (1952)
- University of Technology, Sydney. *Taking final year courses in Electrical Engineering in 1953 prior to successfully obtaining A.M.I.E. Aust. by examination.*
- Memberships:** The Institution of Engineers, Australia.
- Chartered Professional Engineer.
- Rotary International. – Paul Harris Fellow & Past President Cooma Rotary Club.
- Work History:** *(This history omits any mention of Keith's tertiary education at University of Technology, Sydney) (See above)*
- Keith Montague completed his secondary schooling in 1939 at Upwey. At the age of sixteen he secured an apprenticeship in Melbourne with Johns and Waygood Ltd as an Electrical Fitter and Armature Winder, working on motor rewinds, electric lifts, travelling cranes, generator test benches and making control equipment and installation work in a munitions factory that made aerial bombs. Montague said that this experience gave him a sound overall training in practical engineering, which provided him with basic engineering and design experience, when he later transferred into the drawing office.
- After marrying in December 1947 he found a job in the New Construction Design Office of Australian Paper Manufacturers in South Melbourne. He later transferred to the Maryvale Mill in the Latrobe Valley as an Assistant Engineer. Montague completed his engineering studies at the age of twenty nine. Because of the recession of 1952 the work in the Latrobe Valley for the State Electricity Commission Power Generation, also the APM Maryvale Paper Mill, came to an end and the workers were laid off.
- Shortly afterwards, Montague read an article about the Snowy Mountains Scheme in the Current Affairs Bulletin which attracted him immediately. He enquired about the Scheme at the office of Colonel Ramsay, the SMHEA recruiting representative in Melbourne, who in turn arranged an interview for him with the Chief Electrical and Mechanical Engineer J.C. Callinan who came down from the Sydney office.

Montague was given the position of Electrical design Draftsman with the promise that he would be promoted to Engineer within twelve months.

He travelled to Sydney in February 1953, leaving his wife and baby daughter in Melbourne. After a month Montague had obtained a furnished flat near Manly and his wife was able to join him in Sydney. He began as a draftsman on the design of Guthega, in an office where only two of the thirty draftsmen in the office were Australian born. After this he worked as a junior engineer commissioning the automatic turbine control equipment and later on power station operation. Construction on the Tumut 1 project followed Guthega. This was much more difficult in terms of construction because of the underground site and comparatively steep terrain around Tumut 1.

In 1956 Montague transferred from Area Branch Technical Services to Electrical Plant Branch, Sydney, where he gained an intimate knowledge of the electrical plant and control equipment to be installed in Tumut 1 Power Station and the Upper Tumut Switching Station. In August 1958 he was appointed to supervise electrical construction at Cabramurra, where he had oversight of the electrical installations at Tumut 1 and the Upper Tumut Switching Station. Montague noted that there were keen rivalries between Snowy divisions and branches, but overall the common objective prevailed and was a feature of the strong leadership at the top.

As work on Tumut 1 came to an end Montague was selected to go overseas for nine months for in-service experience working in Rhodesia, England, Holland, Switzerland and Italy prior to commencing work in Tumut 2. He left Australia in March 1960 and after a very rewarding time abroad he returned to Australia to begin work on Tumut 2.

The team from Tumut 1 stayed fairly intact for Tumut 2 and the collective experience that they had gained proved to be very useful. In 1963 Montague was called into a meeting with Sir William Hudson in which he was told to organize the visit of Queen Elizabeth II and Prince Phillip to the Snowy Mountains. He was chosen for this task despite the large public relations department, because his attention to detail in the erection of electrical and mechanical plant and control equipment and the achievements of his team in always 'delivering on time' had apparently come to Sir William's notice. The visit was to be like a military operation, everything was to work 'like clockwork'. Thankfully, according to Montague, the visit was a complete success.

In March 1963 after the completion of work in the Upper Tumut region the Area Electrical and Mechanical Branch transferred to the Murray region. Montague was the Area Electrical Engineer, the Senior Electrical Engineer residing in Khancoban. The group commenced work on Murray 1, the largest power station to be built by the Scheme to that time. According to Montague, progress in all phases was excellent. He said that the workers knew that completion dates must be met - it was almost like a single-minded objective, nothing else seemed to matter.

Montague then moved on to Murray 2 in charge of electrical construction and later as the Commissioning Engineer. During this time he appreciated the wide skill level of the engineers and other workers on the Snowy Scheme. Prior to the completion of Tumut 3 Keith was offered the position of Electrical Plant Engineer for the SMHEA operation and maintenance workforce, and despite some misgivings, accepted this position.

In 1984 Montague was invited to present a Technical Paper at a CIGRE World Power Conference in Rio de Janeiro, Brazil, as the Australian

Hydro-power representative to the Conference. By this time he was the Senior Executive Engineer in the Authority and visited a number of projects overseas, including in America, where he investigated the use of computers in control systems for American power stations. On his return to Australia, he initiated placement of a contract with Macro of Philadelphia to prepare a detailed design proposal for the SMHEA data acquisition and control system for all power stations. In later developments this ultimately centralised control of all Snowy Hydro power stations in Cooma

*** Please note. I think the para below could be omitted. It could be read out of context and does not express exactly what was intended. The re-organisation which took place in the late 1980's & which continues to this day ~ changed the organisation significantly as regards the level of 'in house' skills and consequently staff loyalties. Keith says that the downsizing efforts to the Authority has undermined it. Once almost unquestioned loyalty to the organization was the norm, but now it is normal for staff to think first of their own needs.

At the age of 63 Montague formed a Corporate Services Branch establishing a Corporate Plan, objectives, guidelines and Authority procedures and along with two colleagues set about completing a - detailed review of the organization by preparing a Long Term Strategic Plan for renovation and upgrading of hydroplant over the next thirty years. Around this time, the Authority began to concentrate on a computerised Maintenance Management System. With the help of a young engineer Ross Tychsen, Montague initiated a review of the anticipated life span of every installation within the Scheme. Following the release of the Long Term Strategic Planning report, the Snowy Mountains Council approved the objectives of planned refurbishments to plant and equipment contained in the report and a multi million upgrading and refurbishment program was firmly established.

(The Snowy Mountains Council was established under the Snowy Mountains H.E Power Act 1949, and controlled Operations & Maintenance for the Snowy Mountains Authority. The SMC comprised eight members, two each from the Commonwealth, the States of NSW and Victoria and from the SMHEA,)

{****ie it is not a local Govt body! It was disbanded in June 2002 upon Corporatisation of SMHEA which has become Snowy Hydro }

Montague made one more overseas visit, along with colleague Max Talbot and both their wives, visiting Canada, Switzerland, Germany, where they attended a Water Power conference, also to Sweden, Norway and the United Kingdom. This was a technical tour principally to manufacturers while investigating their potential for upgrading SMHEA plant. (*Was this a work-related or a private trip?*) He retired officially on his 65th birthday though he remained with the Authority for another three months to 'wrap up' the three Consultancy Contracts he had begun. Even after retirement Keith was engaged in consultancy work in both Australia and overseas working for SMEC in Africa, China and a project in Yemen.

Prepared by Patricia Taaffe, July 2003, from an oral history interview with Keith Montague conducted by Matthew Higgins on 03.03.99.